

## Abstract

A process and a device that produce gasoline, kerosene and diesel oil from waste plastic, rubber and machine oil, the device comprises successively cracker, fixed bed, packed tower, fractionating tower, the top part of the fractionating tower connects with gasoline quencher, and the quencher links condenser, separator of oil and water, filter, and gasoline treating column in series, the latter is connected with filter, finished product tank; the kerosene fraction from the middle part of the fractionating tower and the diesel oil fraction from the lower part enter condenser, separator of oil and water, filter, and treating column in series respectively, the residue from the bottom returns back to the cracker. In this invention, quartz and sand are added during cracking; one step process is used in fixed bed; a chemical agent for removing the odor and changing the color is added during the fractionation. The device in this invention has low cost and reduced volume, which simplifies the process and shortens the production cycle, the oil product obtained has good quality and high yield.

附图中的文字:

图 1

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|------------------------|--------------------------------|
| 1. Feed                | 8. Diesel Oil                  |
| 2. Packed Tower        | 9. Condenser                   |
| 3. Fixed Bed           | 10. Separator of oil and water |
| 4. Cracker             | 11. Filter                     |
| 5. Fractionating Tower | 12. Treating Column            |
| 6. Quencher            | 13. Product Tank               |
| 7. Kerosene            |                                |

图 2

Fractionating Tower

Condenser